#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

# WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-026649

Address: 333 Burma Road **Date Inspected:** 07-Nov-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

**CWI Name: CWI Present:** Yes No As noted below. **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

**OBG** Component **Bridge No:** 34-0006 **Component:** 

## **Summary of Items Observed:**

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

### In Process Visual Inspection

East Line

This QA observed, at random intervals, ABF/JV qualified welder Salvador Sandoval #2202 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1050A-CU. The joint being welded was a 20mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at E4-PP128-LLH#1 and was performed in the flat position from the top of the "A" deck plate.

During welding, ABF Quality Control (QC) Fred Vonhoff was noted monitoring the welding parameters. Welding parameters were recorded as (A=136).

This joint is a Seismic Performance Critical Member (SPCM) member.

Approximately 9:30 this QA randomly observed QC Vonhoff perform visual verification of joint configuration and planar offset of this 20mm plate insert prior to initiation of the welding process. Inspector Vonhoff recorded that all parameters fell within tolerance of applicable contract documents.

This QA observed, at random intervals, ABF/JV qualified welder Richard Garcia #5892 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved

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Welding Procedure Specification (WPS) ABF-WPS-D15-1050A-CU. The joint being welded was a 20mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at E3-PP128-LLH#4 and was performed in the flat position from the top of the "A" deck plate.

During welding, ABF Quality Control (QC) Fred Vonhoff was noted monitoring the welding parameters. Welding parameters were recorded as (A=134).

This joint is a Seismic Performance Critical Member (SPCM) member.

Approximately 9:45 this QA randomly observed QC Vonhoff perform visual verification of joint configuration and planar offset of this 20mm plate insert E3-PP128-LLH#3 prior to initiation of the welding process. Inspector Vonhoff recorded that all parameters fell within tolerance of applicable contract documents.

This QA observed, at random intervals, ABF/JV qualified welder Richard Garcia #5892 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1050A-CU. The joint being welded was a 20mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at E3-PP128-LLH#3 and was performed in the flat position from the top of the "A" deck plate.

During welding, ABF Quality Control (QC) Fred Vonhoff was noted monitoring the welding parameters. Welding parameters were recorded as (A=134).

This joint is a Seismic Performance Critical Member (SPCM) member.

#### 12E/13E

This QA observed, at random intervals, ABF/JV qualified welder Fred Kaddu #2188 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E9018-MH4-R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1012-3. The joint being welded was a 30mm thick internal longitudinal stiffener butt splice designated as LS#5 on the underside of the "A" deck plate, 12E/13E segment splice location.

During welding, ABF Quality Control (QC) John Pagliano was noted monitoring the welding parameters. Welding parameters were recorded as (A=130).

The work performed at this location is per criteria set in Request For Information (RFI2616R0) for the correction of stiffener misalignment in excess of 10mm. Upon completion, the weld is to be ground in such a way as to achieve a "4 to1" transition between to two misaligned components. Weld transition is to be verified at the completion of welding process.

This QA verbally informed QA SPCM Lead, Daniel Reyes, of the issues noted in this report for compliance. For further details of issues of significance see QA SPCM Lead, Daniel Reyes, "Daily Inspection Report" (TL-6031) submitted for this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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# **Summary of Conversations:**

No relevant conversations.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford,William	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer